

SYSTEMS FOR MONITORING AND CONTROLLING OPERATING MODES IN
AN ETHERNET TRANSCEIVER AND METHODS OF OPERATING THE SAME

ABSTRACT OF THE DISCLOSURE

Disclosed are systems and methods for monitoring and
controlling operating modes in a network transceiver. In one
embodiment, a computer system is associable with an Ethernet
network, and comprises a processing unit, a memory and a
transceiver. The transceiver comprises an encoder, a decoder and
a controller. The controller controls operating modes of the
transceiver, and, specifically, (i) negotiates a communications
channel between the computer system and another computer system
over the Ethernet network wherein the computer system enters one of
a master state and a slave state, and (ii) repeatedly directs, in
response to entering the master state or slave state, the
encoder to encode data to be transmitted to the another computer in
one of an industry-compliant mode and a custom mode until the
encoded data is properly received by the other computer.